

Amendments to the Claims:

Please amend claims 1-3, 8, 14, 20-22, 27 and 33, and add claims 39-43 as shown in the following listing of claims. This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (currently amended) A method for recording operations in a computer environment, said method comprising:
automatically saving initial conditions of said computer environment when a recording is initiated, said initial conditions corresponding to an initial state of said computer environment such that said initial state of said computer environment can be automatically recreated on replay using said initial conditions, said initial state being a particular state from a plurality of possible states for said computer environment; and
recording user inputs to said computer environment to produce a recorded session of said operations in said computer environment.

2. (currently amended) The method of claim 1 wherein said recording saving includes saving positional changes of a cursor in said computer environment.

3. (currently amended) The method of claim 1 wherein said automatically saving includes automatically saving said initial conditions of said computer environment in a first computer file, and wherein said recording includes saving said user inputs to said computer environment in a second computer file.

4. (original) The method of claim 1 wherein said recording includes recording positional information of said user inputs in said computer environment relative to a screen on which said computer environment is being displayed.

- 1 5. (original) The method of claim 1 wherein said recording includes recording
2 timing information of said user inputs.
- 1 6. (original) The method of claim 1 further comprising editing said initial
2 conditions of said computer environment after said initial conditions have been saved.
- 1 7. (original) The method of claim 1 further comprising editing said user inputs to
2 said computer environment after said user inputs have been saved.
- 1 8. (currently amended) The method of claim 1 further comprising:
2 assigning said recorded session to a graphic control device such that
3 said recorded session is replayed when said graphic control device is activated; ~~and~~
4 ~~embedding said graphic control device in an electronic document.~~
- 1 9. (original) The method of claim 1 further comprising replaying said recorded
2 session in a replay computer environment using said user inputs such that said replay
3 computer environment is actively operated by said user inputs to replay said recorded
4 session in said replay computer environment.
- 1 10. (original) The method of claim 9 wherein said replaying includes configuring
2 said replay computer environment using said initial conditions to a state that is
3 substantially identical to said initial state of said computer environment.
- 1 11. (original) The method of claim 10 further comprising creating said replay
2 computer environment as a copy of a current computer environment from which
3 replay of said recorded session has been initiated.
- 1 12. (original) The method of claim 11 wherein said creating includes positioning
2 said replay computer environment over said current computer environment.

1 13. (original) The method of claim 9 wherein said replaying includes selectively
2 delaying said user inputs applied to said replay computer environment such that each
3 of said user inputs is processed before a subsequent user input of said user inputs can
4 be processed.

1 14. (currently amended) A method for replaying recorded computer operations,
2 said method comprising:

3 automatically loading recorded initial conditions of a recorded
4 computer environment into a replay computer environment when a replay is initiated
5 such that the state of said replay computer environment is substantially equivalent to
6 an initial state of said recorded computer environment when said recorded computer
7 operations were recorded, said recorded initial conditions corresponding to said initial
8 state of said recorded computer environment when said recorded computer operations
9 were recorded, said initial state of said recorded computer environment being a
10 particular state from a plurality of possible states for said recorded computer
11 environment; and

12 applying recorded user inputs to said replay computer environment in
13 said state to actively operate said replay computer environment as a replay of said
14 recorded computer operations.

1 15. (original) The method of claim 14 wherein said applying includes applying
2 recorded positional changes of a cursor.

1 16. (original) The method of claim 14 further comprising creating said replay
2 computer environment as a copy of a current computer environment from which
3 replay of said recorded session has been initiated.

1 17. (original) The method of claim 14 wherein said creating includes positioning
2 said replay computer environment over said current computer environment.

1 18. (original) The method of claim 14 wherein said applying includes selectively
2 delaying some of said user inputs applied to said replay computer environment such
3 that each of said user inputs is processed before a subsequent user input of said user
4 inputs can be processed.

1 19. (original) The method of claim 14 further comprising displaying a graphic
2 representation of a control device to illustrate one or more of said recorded user
3 inputs.

1 20. (currently amended) A storage medium readable by a computer, tangibly
2 embodying a program of instructions executable by said computer to perform method
3 steps for recording and replaying operations in a computer environment, said method
4 steps comprising:

5 automatically saving initial conditions of said computer environment
6 when a recording is initiated, said initial conditions corresponding to an initial state of
7 said computer environment such that said initial state of said computer environment
8 can be automatically recreated on replay using said initial conditions, said initial state
9 being a particular state from a plurality of possible states for said computer
10 environment; and

11 recording user inputs to said computer environment to produce a
12 recorded session of said operations in said computer environment.

1 21. (currently amended) The storage medium of claim 20 wherein said recording
2 ~~saving~~ includes saving positional changes of a cursor in said computer environment.

1 22. (currently amended) The storage medium of claim 20 wherein said
2 automatically saving includes automatically saving said initial conditions of said
3 computer environment in a first computer file, wherein said recording includes saving
4 said user inputs to said computer environment in a second computer file.

1 23. (original) The storage medium of claim 20 wherein said recording includes
2 recording positional information of said user inputs in said computer environment
3 relative to a screen on which said computer environment is being displayed.

1 24. (original) The storage medium of claim 20 wherein said recording includes
2 recording timing information of said user inputs.

1 25. (original) The storage medium of claim 20 further comprising editing said
2 initial conditions of said computer environment after said initial conditions have been
3 saved.

1 26. (original) The storage medium of claim 20 further comprising editing said
2 user inputs to said computer environment after said user inputs have been saved.

1 27. (currently amended) The storage medium of claim 20 further comprising:
2 assigning said recorded session to a graphic control device such that
3 said recorded session is replayed when said graphic control device is activated; and
4 ~~embedding said graphic control device in an electronic document.~~

1 28. (original) The storage medium of claim 20 further comprising replaying said
2 recorded session in a replay computer environment using said user inputs such that
3 said replay computer environment is actively operated by said user inputs to replay
4 said recorded session in said computer environment.

1 29. (original) The storage medium of claim 28 wherein said replaying includes
2 configuring said replay computer environment using said initial conditions to a state
3 that is substantially identical to said initial state of said computer environment.

1 30. (original) The storage medium of claim 29 further comprising creating said
2 replay computer environment as a copy of a current computer environment from
3 which replay of said recorded session has been initiated.

1 31. (original) The storage medium of claim 30 wherein said creating includes
2 positioning said replay computer environment over said current computer
3 environment.

1 32. (original) The storage medium of claim 28 wherein said replaying includes
2 selectively delaying said user inputs applied to said replay computer environment
3 such that each of said user inputs is processed before a subsequent user input of said
4 user inputs can be processed.

1 33. (currently amended) A storage medium readable by a computer, tangibly
2 embodying a program of instructions executable by said computer to perform method
3 steps for replaying recorded computer operations, said method comprising:

4 automatically loading recorded initial conditions of a recorded
5 computer environment into a replay computer environment when a replay is initiated
6 such that the state of said replay computer environment is substantially equivalent to
7 an initial state of said recorded computer environment when said recorded computer
8 operations were recorded, said recorded initial conditions corresponding to said initial
9 state of said recorded computer environment when said recorded computer operations
10 were recorded, said initial state of said recorded computer environment being a
11 particular state from a plurality of possible states for said recorded computer
12 environment; and

13 applying recorded user inputs to said replay computer environment in
14 said state to actively operate said replay computer environment as a replay of said
15 recorded computer operations.

1 34. (original) The storage medium of claim 33 wherein said applying includes
2 applying recorded positional changes of a cursor.

1 35. (original) The storage medium of claim 33 further comprising creating said
2 replay computer environment as a copy of a current computer environment from
3 which replay of said recorded session has been initiated.

1 36. (original) The storage medium of claim 33 wherein said creating includes
2 positioning said replay computer environment over said current computer
3 environment.

1 37. (original) The storage medium of claim 33 wherein said applying includes
2 selectively delaying some of said user inputs applied to said replay computer
3 environment such that each of said user inputs is processed before a subsequent user
4 input of said user inputs can be processed.

1 38. (original) The storage medium of claim 33 further comprising displaying a
2 graphic representation of a control device to illustrate one or more of said recorded
3 user inputs.

1 39. (new) The method of claim 1 wherein said automatically saving includes
2 automatically saving said initial conditions of said computer environment in a log
3 file, said log file including complete definitions of every control in said computer
4 environment.

1 40. (new) The method of claim 6 wherein said editing said initial conditions
2 includes editing one or more graphic items in said computer environment independent
3 of said user inputs to modify said initial state of said computer environment.

1 41. (new) The method of claim 7 wherein said editing said user inputs includes
2 editing moving one or more mouse events after said mouse events have been recorded
3 as some of said user inputs independent of said initial conditions.

1 42. (new) The method of claim 11 wherein said creating comprises:
2 creating a connection for said replay computer environment;
3 establishing said connection between said replay computer
4 environment and said current computer environment on a predetermined port;
5 sending messages across said connection from said current computer
6 environment to said replay computer environment to control said replay computer
7 environment; and
8 sending acknowledgement across said connection from said replay
9 computer environment to said current computer environment to synchronize
10 behaviors of said replay computer environment and said current computer
11 environment.

1 43. (new) The method of claim 14 wherein said automatically loading includes
2 automatically loading a log file into said replay computer environment, said log file
3 including complete definitions of every control in said recorded computer
4 environment with respect to said initial state.